

IP TELEPHONY:**CONVERGENCE IS FINALLY HERE TO STAY**

By Joseph Heinzen

Vice President of Engineering and Professional Services

"I think there is a world market for maybe five computers." Those are the now-famous words spoken by Thomas Watson, chairman of IBM, back in 1943 — well before the dawn of the computer age.

Fast-forward to the early '90s — before the dawn of IP (Internet protocol) telephony — and you probably heard similar protests. "Voice and data on the same network? Impossible!" But ask that today and the answer would be: "Of course!" Recent engineering advances have made it the platform of choice.

For years, convergence technology had promise, but was too risky to be practical. One reason was a lack of attention to the requirements of voice transmission, which is considerably more tricky than data. A one-second data delay — hey, no sweat. But try that with a phone call and see what happens.

I'm not the only one singing the praises of convergence. Despite a shaky economy, Cisco's IP telephony sales have grown 100% each quarter for the last six months, while sales for that granddaddy of voice technology — PBX — were down 16 percent. Obviously, end users — lots of them — are buying this technology. Shouldn't they be buying it from you?

It's an easy sell. For one, it's tough to justify separate voice and data staff when one common platform is available. And it's much easier to find qualified IP people; nobody teaches voice platforms anymore. From a hardware perspective, convergence means companies save on space and energy. And there are the applications: voice-enabled commerce, unified messaging, directory-enabled services, to name a few. It's far more than a way to save on phone charges. A converged network improves

ROBIN BEHNSTEIN
Public Relations Specialist
31 Wintergreen Drive
Melville, NY 11747
Phone/Fax 516-423-1544

customer-care capabilities, increases productivity and enhances corporate agility.

But it requires a complex set of skills. The good news is that The Pro Shop is now certified for IP Telephony Specialization through Cisco's new AVID (Architecture for Voice, Video and Integrated Data) program. And, as of May 2001, we are an official Cisco Professional Service Partner (PSP), which entailed an extensive audit of our project implementation processes.

By partnering with us, you can quickly enter the lucrative convergence arena without worrying about competition. It's no easy feat to go from data to voice, but we let you do it faster, without risk. In fact, our expertise is why Cisco once referred a reseller to us for a telephony installation, despite the fact that the equipment was purchased elsewhere.

If convergence is in your future, we offer a fixed-price AVID solution that is packaged to sell, whether for pilot programs or full-scale deployment. I hope you enjoy this issue of Pro Shop Talk. As always, I welcome your comments. Just drop a line to proshop@comstor.com.

ROBIN BEHNSTEIN
Public Relations Specialist
31 Wintergreen Drive
Melville, NY 11747
Phone/Fax 516-423-1544

Your Source for Trends
and Opportunities in
Professional Services

Brought to you by
Comstor's Professional
Services Team,
The Pro Shop™



Joseph Heinzen
VP of Engineering and
Professional Services



Giving You the Competitive Edge

comstor
networking together

800-COMSTOR
www.comstor.com/proshop



Steve Lehrke,
Manager of US
Engineering Services

THINKING OF DOING IP TELEPHONY ALONE? THINK AGAIN!

A few years ago, communication needs were simple; you only had to contact a phone company or invest in a PBX to ensure you had a dependable dial tone. Those days are gone. Today's communication needs for effectively competing are much more sophisticated. Business applications are evolving and driving convergence, thus creating demand in the marketplace for IP Telephony.

The following Q&A will help explain why implementing IP Telephony without the necessary expertise is not a good idea. In other words: Don't try this at home.

TOPIC: Why You Should Partner With Comstor On IP Telephony Projects

Q: Can you describe Cisco's requirements for IP Telephony projects?

A: Cisco's convergence technology greatly reduces the risk of ownership of data and voice networks and, therefore, enables your customers to compete more. Cisco has developed its own set of standards for successfully implementing IP Telephony solutions. Cisco requires that a certified IP partner implement such solutions. Let me explain how The Pro Shop can help.

First of all, let me begin by saying that we do not sell to end-users — ever. We act as an extension of your company.

Our expert staff has the advanced engineering skills needed, from CCNA through CCIE, with all our engineers holding multiple industry certifications. We have a lifetime of experience integrating and implementing such projects, not just "book smarts." This expertise gives us the insight into any design and/or equipment changes that might be necessary before the implementation begins, whereas other companies may not see that these changes are necessary until the actual implementation. This could cause delays in the project.

The Pro Shop is the only distributor that is a Cisco Professional Services Partner (PSP). Along with our knowledge and experience, we have a certified and comprehensive delivery methodology, which is recognized by Cisco, and which is already in place when implementing these projects.

Not only is The Pro Shop Cisco PSP-certified, but we also carry the following organizational certifications: Security, Voice Access, and Wireless; not to mention that our engineers carry CCIE, CCNP, CCNA, CCDA, CCDP, Security, Voice Design, and Voice Implementation certifications.

Comstor's sales force can get a "one-off" for solution providers (to see how easy it is...call your Comstor Cisco certified sales expert for details) who have not acquired their own IP Telephony certification. Meaning, resellers can get a one-time approval from Cisco to install IP Telephony without specialization.

They must have a certified partner, someone like the Pro Shop, in order to complete the installation.

Q: How does Comstor help its partners reduce risk during IP Telephony projects — specifically, during the pre-sales, close, and delivery phases?

A: Understanding and defining risks that are not obvious can be very difficult. The Pro Shop's senior-level experience with logistics, technology, and implementation gives us the insight to determine these unforeseen risks and help eliminate them before they become a reality.

Comstor's entire sales force is AVID-certified to help you in the pre-sales phase. And our IP Telephony experts help customers design a complete system to assure quality and help increase "close" probability.

We assign two Comstor Pro Shop professionals, a project manager and project engineer to take full responsibility for the job and ensure its success. We pride ourselves on personal customer care and support. During the close phase, we provide projects-based fixed-price proposals and a comprehensive statement of work (SOW) which helps eliminate surprises. Everything is detailed, and the customers know exactly what they are getting for their money.

Customers benefit from our team approach. With Comstor as your partner, you get an experienced IP Telephony team to back you during delivery. Our Network Integration Center is key during this phase to reduce risks. We furnish our customers with Customer Satisfaction Surveys during and after the job to help reduce any risks and surprises, and our engineers' extensive experience in implementation and IP Telephony plays an important part in reducing risks.

Q: What problems can solution providers encounter when they don't utilize a partner with experience in IP Telephony?

A: As many of you have probably already heard, there have been many challenges to solve when implementing IP Telephony. Many solution providers have not been fully prepared to implement such complex solutions. That is exactly why Cisco is in the process of revamping its requirements for IP Telephony certification.

(continued on page 3)

COMSTOR'S STATE-OF-THE-ART LAB:

Conduct Customized Training,
Design, Staging and Testing
with High-Level Engineers

What could best providing your staff with hands-on, customized training and engineering consultation at a million-dollar facility?

Answer: Not having to invest the million dollars yourself. Comstor's labs and classrooms in Chantilly, VA and Bloomfield, CO are available for custom courses where personnel can work on the very equipment they're learning about. You can supplement your training regimen by resolving the proof-of-concept and interoperability issues that can delay a complex installation.

Solution providers can create the exact configuration they want to implement, stage and configure that equipment, and test the system to make sure it performs. You'll be assigned one of Comstor's senior networking engineers with specific expertise in the area of technology you're working in. You can even demo the completed system for a local end-user.

Take advantage of Comstor's investment; for pricing and program information, call Jim Gavin at 800-955-9590 in the eastern US and Steve Rodgers or Tom Humble at 800-543-6068 in the west.



Giving You the Competitive Edge

comstor
networking together

800-COMSTOR
www.comstor.com/proshop

ENGINEERING SNAPSHOT:

Phil, Senior Network Systems Engineer
Certifications: CCDA; has all Cisco-required qualifications to sell, install and maintain CISCO IP Telephony applications

WHY THE PRO SHOP?

According to Phil, solution providers faced with IP Telephony convergence projects must look for experienced partners who are versed in sophisticated, cutting-edge technology. The Pro Shop has more than 100 years of combined expertise on its telephony team. We have core telephony experts, Cisco experts and MCSEs (certified Microsoft systems engineers) — everyone you need for deploying a convergence solution.

MEMORABLE CAREER ACHIEVEMENT:

Before joining The Pro Shop last year, Phil deployed a converged network for a large health-care organization

in Virginia. It comprised more than 10,000 Centrrix lines and tie-lines with 14 PBXs spread across 315 medical offices. The toughest part: putting the PBXs on their ATM data network. Phil's team had to mask the data from the voice network so the PBX could continue to run; the client was on a tight budget and couldn't afford a PBX upgrade. Phil then added an optical network for survivability. He gave the organization one integrated voice/data solution with one dialing pattern, working with local service providers to link all offices. This gave the client uniform billing and features, ultimately saving a lot of time and money. (continued on page 4)

THINK AGAIN continued from page 2

Most solution providers are experienced with data and have little exposure to voice solutions. There is a lot less room for error when dealing with voice. Voice requires a much smaller tolerance for errors. If a trader on an exchange floor doesn't get a dial tone, you can imagine the difficulties it causes. Delays in data are acceptable, which is what most resellers are accustomed to. Also, in some states there are significant penalties for 911 delays.

Installing and operating an efficient IP Telephony system requires a lot more than just knowing what should be sold. Implementations can easily run behind schedule for newcomers because of the lack of experience in voice solutions — thus the need for experience in voice. The Pro Shop provides the needed expertise while avoiding the traditional risks associated with partnering!

Q: Can you describe the advantages of your Network Integration Center and your state-of-the-art, million-dollar labs?

A: The Pro Shop's Integration Center offers cost-effective staging and configuration solutions for basic or advanced product integration and testing. Product can be configured, tested and burned-in prior to shipment to reduce risks. That enables us to ensure that the equipment is "ready to run" when it arrives on-site. This process allows us to minimize on-site installation time, which reduces or eliminates interruptions for the reseller's customers. DOAs and RMAs are almost eliminated, too!

The Pro Shop's "Proof of Concept Testing" eliminates the risk of design errors. Our Network Integration Center provides the best implementation for a reseller and reduces as much risk as possible.

Our Network Integration Center is located in the same facility as our warehouse. This offers quicker response time; if a product is defective, we pull a good one off the shelf.

Since we are Cisco experts, we tend to know first when/if any fixes are necessary. All of our engineers are Cisco-certified; therefore, you can expect to get the help you need...now.

Q: If a Solution Provider is considering using The Pro Shop's services, does your offering allow them to remain competitive, and how?

A: Speak to any reseller out there, and they will tell you that the time and resources it takes to get certified in IP Telephony is not an easy feat. Often times, the solution provider can't afford the level of engineers that are needed; they don't want to, don't have the money, or simply just can't take the time away from providing services to their existing customers. We have those specialists on staff. We have made that investment for the solution provider. This allows you to focus on what you know and on your business needs.

Since we understand the end-users' expectations for pricing, we have developed a tried-and-proven pricing model, which eliminates risks and allows for mark-up and greater reseller/VAR profits.

Q: Any closing comments?

A: We want our Cisco reseller partners to know they can still capitalize on the fast-growing IP Telephony marketplace, even if they don't have their certification yet or are not planning to get it. The Pro Shop is a risk-free, viable, and profitable partner for them to turn to.

PRO SHOP CERTIFIED ENGINEERS

Certified, qualified,
expert staff...ready to
augment your own

Our expert staff has the advanced engineering skills you need — from Cisco-Certified Networking Associates (CCNA) through Cisco-Certified Integration Engineers (CCIE). Many of our engineers hold multiple certifications. Just as vital, our engineers understand business processes and can communicate intelligently with you and your customers — whether they are small-business owners or Fortune 500 CEOs, whether they're from the local school district or the federal government.

PRO SHOP SKILLS INVENTORY Organizational Certifications:

Cisco — Current
PSP (Professional Services Partner)
IPTelephony
Security
Voice Access
Wireless LAN
VPN/Security
Network Management — In Progress

RSA, Check Point, ADTRAN
*Connector is the only distributor with the deflector

Individual Engineer Certifications:

Cisco	CCIE CCNP CCNA CCDA CCDP Security Voice Design Voice Implement
Microsoft	MCP MCSE
Citrix	CCA CCEA
Novell	CNA CNE
Sun	Engineer
RSA	RSA-CNE
Check Point	CCSA CCSE
Industry	Various



Giving You the Competitive Edge

comstor
networking together

800-COMSTOR

www.comstor.com/proshop

HARDWARE CORNER:

CISCO CALLMANAGER

Cisco CallManager is the software-based call-processing component of the Cisco IP telephony solution. The software extends enterprise telephony features and functions to packet telephony network devices such as IP phones, media processing devices, voice-over-IP (VoIP) gateways and multimedia applications. Additional data, voice and video services such as unified messaging, multimedia videoconferencing, collaborative contact centers and interactive multimedia response systems interact with the IP telephony solution through Cisco CallManager's open telephony application programming interface (API). Cisco CallManager is installed on the Cisco Media Convergence Server (MCS) 7800 series and the Cisco Integrated Communication System (ICS) 7750.

CISCO UNITY MESSAGING

Cisco Unity is a powerful Unified Communications server that provides advanced, convergence-based communication service — such as voice mail and unified messaging—on a platform that offers the utmost in reliability, scalability and performance. With Cisco Unity, users can listen to their e-mail over the telephone, check voice messages from the Internet and forward faxes to any local fax machine. Built on a platform that can scale to meet an organization's needs as it grows, Cisco Unity also uses streaming media and an intuitive

HTML browser-style system administration interface that makes life easier for IT staff and lowers the cost of ownership.

As an integral part of the Cisco Architecture for Voice, Video and Integrated Data (AVVID) environment, Cisco Unity complements the full range of Cisco's IP-based voice solutions by providing advanced capabilities that unify data and voice. Because it's designed for a converged network, Cisco Unity provides a solid foundation for rolling out future convergence-based communications services, such as real-time desktop call control.

MIGRATION AND HYBRIDS

Some end-users may be ready to turn in their PBX for a full-scale migration to IP telephony. Others may want to test the waters with a hybrid architecture that links an IP telephony solution with an existing legacy system. Whatever the customers' needs, Cisco's IP Telephony solutions can accommodate them. VoIP is an untapped market for resellers, with a potentially high return-on-investment and a profit margin that is typically greater than the traditional LAN/WAN installation. By partnering with The ProShop, resellers can combine their knowledge of Cisco and Microsoft platforms with our voice expertise, and grab a piece of the action — whether the solution is hybrid or all-out migration.

ENGINEERING SNAPSHOT continued from page 3

BACKGROUND:

Phil joined The Pro Shop to oversee its growing AVVID telephony line, which includes developing system models and pricing. He previously spent seven years with Bell Atlantic (now Verizon) as a systems engineer in charge of the management and design of LAN/WAN and telephony solutions for the company's top customers. He handled multi-vendor design and many large projects involving deployment of IP and converged networks across all transports and technologies. Notably, Phil was the first at Bell Atlantic to have built an ISDN data network. He began his

career as director of information systems for a local government agency.

QUOTE:

"Delivering an IP telephony solution requires many disciplines. You need experts in telephony, optical, wireless, Microsoft, switching, routing, security. You have to deal with issues that could make the best COEs sweat. Getting a converged network to 'play nice' is always a challenge. It's a whole new paradigm, merging telephony and route switching. It's a huge team effort."

ROBIN BERNSTEIN
WRITE TIME COMMUNICATIONS
31 Wintergreen Drive
Melville, NY 11747
P/F: 631-423-1544
prwriter@optonline.net
www.write-time-communications.com

Comstor, Inc.

4850 Conference Center Drive, Suite 200, Chantilly, VA 20151 • Fax: (703) 545-5577
10000 Parkrock Blvd., Suite 100, Broomfield, CO 80021 • Fax: (303) 222-4870
New York: 520 White Plains Road, Tarrytown, NY 10591 • Fax: (914) 829-4040

© 2001 Pro Shop is a service mark of Comstor. All product names are trademarks or registered trademarks of their respective companies.

CISCO REVISES IP TELEPHONY SPECIALIZATION

Cisco has made important changes to its IP Telephony Specialization. As per the dates below, Cisco will no longer accept applications from partners for the former IP Telephony Specialization. Partners wishing to achieve IP Telephony are encouraged to pursue the revised IP Telephony requirements.

DEADLINES: US partners who completed all requirements and successfully submitted their old IP Telephony applications by Monday, October 15, 2001 will be considered eligible for the previous IP Telephony Technology Specialization. Be advised, effective March 31, 2002, US partners holding the old IP Telephony Technology Specialization badge will no longer have access to the restricted IP Telephony products. This benefit, among others, will be available only to IP Telephony-Revised partners.

Going forward, US partners must complete the IP Telephony-Revised requirements in order to achieve IP Telephony specialization. Quite a few changes have been made to this specialization. For example, in addition to previous requirements for an Account Manager, Field Engineer, and System Engineer, you must now also establish a Project Coordinator, Field Engineer 2 and an Operations Specialist. One individual may hold two job roles within a specialization and participate in up to two specializations.

Partners who choose not to transition to the new requirements will retain their old IP Telephony Technology Specialization status until their one-year renewal date. Partners will maintain their listing on the Cisco Partner Locator, and will also retain the current specialization point value for the balance of their specialization period.

Comstor offers IP Telephony courses and can help you find the courses you need for any of Cisco's certification and specializations, including on-site and custom courses.



Giving You the Competitive Edge

comstor
networking together

800-COMSTOR
www.comstor.com/proshop